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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,475	06/11/2001	Kaori Kojima	15162/03230	1997
24367	7590	09/08/2004	EXAMINER	
SIDLEY AUSTIN BROWN & WOOD LLP			THOMPSON, TIMOTHY J	
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SUITE 3400			ART UNIT	
DALLAS, TX 75201			PAPER NUMBER	
			2873	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/878,475

Applicant(s)

KOJIMA ET AL.

Examiner

Timothy J Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 16, 17 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 16, 17 and 20-23 is/are allowed.
- 6) ☒ Claim(s) 6-9 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al.(U.S. Patent No. 5,475,537) in view of Choi(U.S. Patent No. 5,940,360) and Aratani et al. (U.S. Patent No. 6,278,554).

Regarding claim 6, Kobayashi et al. discloses; wherein the imaging lens is made from an object side thereof a first lens element(fig 1, 3), being a positive meniscus lens element convex on the image side(table 1, surface 1, surface 2); an aperture stop(fig 1, 5), and a second lens element being a bi convex positive lens element(fig 1, 2; table 1, surfaces 3 and 4). Kobayashi et al. does not disclose a two dimensional image sensing device that converts the optical image formed by the imaging lens system into an electronic system disposed on the image side of the imaging lens system. However, Choi discloses an image sensing device disposed on the image side of the imaging lens system (fig 2, 190) that converts the optical image formed by the imaging lens system(fig 2, 170) into an electronic system and thus positioning the two light sources(fig 2,

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130, 140) off of the optical axis, of different wavelengths, so as to reads discs of two types having different densities(col 1). It would have been obvious to one skilled in the art to use an image sensing device disposed on the image side of the imaging lens system as shown by Choi, in the optical pickup device of Kobayashi et al., since as shown by Choi, image sensing devices disposed on the image side of the imaging lens system are commonly used in optical pick up devices for reading discs of two types having different densities. And Aratani et al. discloses that CCDs are commonly used as image sensing devices in optical pickup devices(col 8, lines 30-35). It would have been obvious to one skilled in the art at the time of the invention to use a CCD as a sensor in the optical pickup device of Kobayashi et al., since as shown by Aratani et al., CCDs are commonly used in optical pickup devices for detecting the light reflected from the optical disc.

Regarding claim 7, Kobayashi et al. discloses at least one of the first lens element and the second lens element is a glass lens element(col 10, lines 45-50), and wherein at least one surface of the glass lens element is an aspherical surface(example 1, first surface).

Regarding claim 8, Kobayashi et al. discloses each of the first lens element and the second lens element has at least two surfaces(example 1, surfaces 1-4, and wherein at least one surface of the glass lens element is an aspherical surface(example 1, first surface).

Regarding claim 9, Kobayashi et al. discloses the  $Bf / f = .234$ .

***Allowable Subject Matter***

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-5, 16, 17, 20-23 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art taken either singularity or in combination fails to anticipate or fairly suggest the limitations of the independent claim, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claims 1, 6, 16, 20-23, With the important features being; the conditional formulas pertaining to; the distance from the most object side lens surface to an image plane with the image plane coinciding with the image sensing device; or the ratio of the first lens to the overall focal length of the entire system are not found in the prior art. Therefore claims 1-5, 16, 17, 20-23 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Thompson whose telephone number is (571) 272-2342. If the examiner can not be reached his supervisor, Georgia Epps, can be reached on (571) 272-2328.

T.J.T. 9/1/04